# An information update for WIC staff

#### ■ INAPPROPRIATE FEEDING PRACTICES FOR CHILDREN

Inappropriate feeding practices include the regular or routine consumption of foods that displace or reduce nutrients available for growth and development. The most common practices include:

- Excessive consumption of fruit juices
- Consumption of nonfat milk or reduced-fat milk as the primary milk source between 12 and 24 months of age
- Routine consumption of foods and beverages low in essential nutrients and high in calories
- Consumption of foods that put children at risk of choking Inappropriate feeding practices also include behaviors that compromise the parent-child feeding relationship. A healthy parent-child feeding relationship helps the child progress in the development of eating skills and consume a nutritionally adequate diet.

#### ROUTINE/EXCESSIVE CONSUMPTION

The routine or excessive consumption of any one food or beverage will displace other, more nutritious, foods and reduce nutrients available for growth and development.

#### Fruit juice

The American Academy of Pediatrics recommends that intake of juice by children ages 1 to 6 years be limited to 4 to 6 ounces of 100 percent fruit juice per day. Consumption of 6 or more ounces of fruit juice per day by children has the potential to replace or displace other nutritious foods. Excessive consumption of fruit juice has been linked to failure to thrive, gastrointestinal problems, and development of dental caries. On the other hand, fruit juice is a concentrated source of calories, and may lead to excessive weight gain.

Sorbitol-containing juices (i.e., prune, pear, sweet cherry, and apple juice) may have a laxative effect (cause diarrhea) if consumed in large amounts. Sorbitol, a sugar alcohol, is absorbed more slowly than simple sugars such as sucrose,

fructose, and lactose. When large amounts of sorbitol-containing juices are consumed, diarrhea can result due to nonabsorption of much of the sorbitol.

#### Nonfat and reduced-fat milk

Children younger than 2 years who consume reduced-fat milk are at risk of an inadequate intake of essential fatty acids — integral parts of cell membranes that play a role in immune-system function and in vision. These essential fatty acids also produce *eicosanoids*, hormonelike compounds that are important in the regulation of vital body functions such as blood pressure, blood clotting, and immune and inflammatory responses.

Nonfat milk and reduced-fat milk are lower in fat and higher in protein and electrolytes. Because of the lower calories and fat, a larger amount is required to satisfy caloric needs of children younger than 2 years old. (The general recommendation is 16 ounces of milk a day. If a child is offered more, it is possible that he will not be hungry for other foods that provide essen-

tial nutrients, especially iron, and he will be at risk of developing iron-deficiency anemia.)

## Foods and beverages low in essential nutrients and high in calories

Children between the ages of 12 and 24 months still have a small stomach capacity. The consumption of foods and beverages low in essential nutrients and high in calories can quickly decrease their appetites and reduce their consumption of more nutritious foods.

Foods and beverages included in this category may include candy, cookies, cake, soft drinks, fruit drinks and Kool-Aid—type drinks, and fried snack foods such as chips.

#### RISKS FOR CHOKING

Foods of inappropriate consistency, size, or shape may put a child younger than 4 years at risk of choking. The risk of choking on these foods depends on the child's developmental status and will vary from child to child.

## Foods that may pose a risk for choking include:

- small nuts and seeds
- foods that are round, firm, smooth, or slick grapes, peanuts, hard candy, hot dogs, large pieces of fruit with skin, some canned fruits (canned peaches, pears)
- foods that are dry and hard raw carrots, cookies, pretzels, potato chips, popcorn
- foods that are sticky or tough peanut butter, raisins and other dried fruits, tough meat, chewing gum and caramel candy
- fish with bones

## Tips for parents and caregivers to help prevent choking:

- Cook foods until they are soft.
- Cut foods into small pieces such as short strips or quarters.

- Remove pits and seeds from fruits such as oranges, grapes, and watermelon.
- Grind or chop nuts.
- ■Don't give peanut butter to children younger than 2 years. For children older than 2, spread a thin layer onto bread or mix it with foods such as applesauce, yogurt, or jelly to make it easier to swallow.

## THE PARENT-CHILD FEEDING RELATIONSHIP

The feeding relationship between a parent and child helps determine the child's eating behavior. The parent needs to be sensitive to the child's developmental needs and provide age-appropriate, nutritious foods at regularly scheduled meals and snacks. The responsible parent will also help the child develop appropriate eating practices by providing an environment that is safe and dependable. This will allow the child to explore and learn to regulate his or her own eating patterns and to choose appropriate foods.

The practice of "demand feeding" during infancy helps the infant to associate feelings of hunger and fullness with the beginning and ending of a feeding. This experience is very important in developing control of food intake.

By toddlerhood, however, children no longer benefit from feeding on demand and need to experience structure and limits while eating. They also need to experience independence in feeding themselves and to develop eating habits in response to internal needs.

## MISCONCEPTIONS CONTRIBUTING TO INAPPROPRIATE FEEDING PRACTICES

Inappropriate feeding practices lead to poor dietary intake — either inadequate or excessive intake — and contribute to poor growth and nutritional status. Caregivers are responsible for helping children learn appropriate feeding prac-

tices. Common eating behaviors for toddlers include refusing to eat, demanding snacks between meals, throwing tantrums during mealtime, and preferring to play instead of eating. Sometimes misunderstandings of childhood eating behaviors lead to mistakes during this period and they may contribute to lifelong inappropriate feeding practices in children. If caregivers are knowledgeable of these behaviors and can anticipate them, they will be better prepared to deal with them.

Some common misconceptions that may lead to inappropriate feeding practices include:

- Forcing a child to eat a certain type or amount of food. This practice may teach the child to associate anxiety, rather than hunger and fullness, with eating. Children learn by observation, so the best practice is for the parent or caregiver, older siblings, and other family members to eat the same foods offered to the child. Caregivers need to recognize that children may be picky eaters. Children may avoid new foods but, after being offered a new food over time, can learn to accept new foods. Also, forcing a child to eat a certain amount of food doesn't allow him to recognize when he feels full and satisfied and should stop eating.
- Offering food as a reward. When food is offered as a reward for eating a certain food or performing an activity, the child learns that food has a role other than satisfying hunger. The desire for the "reward food" is increased, and the behavior being rewarded will not change or will be more strongly rejected.
- Restricting junk foods. Restricting certain foods actually focuses the child's attention on the restricted food and may increase his desire for it. At the same time, the ability of the child to develop self-control in eating may decrease. The best practice is to limit portions and how frequently these foods are offered.
- Ignoring a child's requests for food when he is hungry, or restricting a child's ability to

consume nutritious meals at an appropriate frequency per day. Counsel parents and caregivers to recognize that a child's stomach is smaller than an adult's and the child will feel hungry more often. During the preschool years, however, environment and social setting begin to influence eating, and the timing of meals is not exclusively controlled by hunger cues. It is important to offer meals and snacks at regularly scheduled times every day so the child can learn to adapt to these environmental and social demands.

■ Not supporting a child's need for growing independence with self-feeding or offering a child primarily pureed or liquid food when the child is developmentally ready and capable of eating foods of appropriate textures. Counsel parents and caregivers to encourage self-feeding by offering finger foods, foods of appropriate textures, and appropriate utensils that are easy for the child to hold. Children will experience some difficulties and create small messes, but that is normal and, in fact, critical in developing independence and skill in feeding themselves.

#### Suggested Readings

Pipes, P. L. 1993. *Nutrition in Infancy and Childhood,* Fifth ed. New York: McGraw-Hill.

Satter, E. M., 1999. "Feeding Dynamics: Helping Children to Eat Well." *J. Pediatric Health Care* 9: 178–84.

——. 1990. "The feeding relationship: Problems and Interventions." *J. Pediatrics* 117: 181–89.

Wardlaw, Gordon M. 1999. *Perspectives in Nutrition*. Fourth ed. New York: McGraw-Hill. 596–602.

	LF-STUDY QUESTIONS  Excessive consumption of fruit juice has been associated with:
	a) failure to thrive
	b) diarrhea
	c) excessive weight gain
	d) all of the above
2.	Children younger than 4 years old who consume reduced-fat milks are at risk of inadequate intakes of essential fatty acids.
	True
	False
3.	The risk of choking on foods is:
	a) based only on the consistency, or shape of the food.
	b) based on the development of the child.
	c) the same for all children under the age of four.
	d) all of the above.
4.	Inappropriate feeding practices:
	a) contribute to poor growth.
	b) lead to inadequate or excessive intake of food.
	c) may be the result of a poor parent-child feeding relationship.
	d) are all of the above.
5.	List five common misconceptions that may contribute to inappropriate feeding practices in children:



